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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,798	09/04/2003	Philip Houghton	15006US01	6962
23446 7590 03/27/2008 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER TIEU, BINH KIEN	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 03/27/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/654,798	Applicant(s) HOUGHTON ET AL.	
	Examiner BINH K. TIEU	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-34 and 36-39 is/are allowed.
- 6) ☐ Claim(s) 6-20, 25-29, 35 and 40-42 is/are rejected.
- 7) ☐ Claim(s) 21-24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 11 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Couillard (Pub. No. US 2002/0129290).

Regarding claim 11, Couillard teaches a method of transmitting time sensitive data from at least a first computing device to at least a second computing device in a communication system comprising:

requesting absolute time from a network time protocol (NTP) server;

receiving said absolute time; and

inputting an adjustment parameter derived from said absolute time into a circuitry to synchronize said at least a first computing device to said at least a second computing device (paragraphs [0047]-[0052]).

Regarding claim 18, Couillard teaches method of transmitting time sensitive data from at least a first computing device to at least a second computing device in a communication system comprising:

receiving absolute time requests from said at least first and at least second computing devices; and

transmitting said absolute time to said at least first and at least second computing devices; wherein said absolute time is used to synchronize said at least a first and at least a second computing devices (paragraphs [0047]-[0052]).

Regarding claim 19, Couillard teaches a method of synchronizing a transmitting computing device to a receiving computing device of a packet switched telecommunication network comprising:

requesting absolute time from a network time protocol (NTP) server;

receiving said absolute time; and

inputting an adjustment parameter into a frequency controlling hardware of said transmitting computing device or said receiving computing device (paragraphs [0047]-[0052]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 6-8 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Fischer et al. (Pub. No.: US 2002/0027886).

Regarding claim 6, Couillard teaches a method comprising:

synchronizing at least a first computing device and at least a second computing device to network time protocol (NTP) server (paragraphs [0047]-[0052]). Couillard further teaches that a first client station 1 and a second client station 5 are in communication with each other (see figure 2a) and with a time server 3 via a widely distributed communication network 2 such as Internet of the World Wide Web (WWW) (see paragraph [0046] and [0044]).

It should be noticed that Couillard fails to teach the features of transmitting voice and voice band data to each other. However, Fischer et al. ("Fischer") teaches such features in paragraphs [0384]-[0385] and [0387] for a purpose of providing Voice-over-IP service to end users.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of transmitting voice and voice band data to each other, as taught by Fischer, into view of Couillard in order to provide Voice-over-IP service to end users.

Regarding claims 7-8 and 12-14, Fisher further teaches limitations of the claims in paragraphs [0384]-[0385] and [0387].

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Fischer et al. (Pub. No.: US 2002/0027886) as applied to claim 6 above, and further in view of Michelson et al. (Pub. No.: US 2008/0031229).

Regarding claim 10, Couillard and Fischer, in combination, teaches all subject matters as claimed above, except for the feature of residential VoIP gateway. However, Michelson et al. ("Michelson") teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway in order to provide VoIP service to end users.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Michelson et al. (Pub. No.: US 2008/0031229).

Regarding claim 15, Couillard teaches all subject matters as claimed above, except for the feature of residential VoIP gateway. However, Michelson et al. ("Michelson") teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway in order to provide VoIP service to end users.

7. Claims 16-17, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Sullivan (Pub. No.: US 2007/0297541).

Regarding claims 16-17 and 25, Couillard fails to teach said circuit comprising a frequency oscillator and wherein the frequency oscillator comprising a numerically controlled oscillator. However, Sullivan teaches such features in paragraph [0006] for a purpose of adjusting a clock.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of said circuit comprising a frequency oscillator and wherein the frequency oscillator comprising a numerically controlled oscillator, as taught by Sullivan, into view of Couillard in order to synchronize a time.

8. Claims 26-27 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Fischer et al. (Pub. No.: US 2002/0027886) as applied to claim 6 above, and further in view of Hostetter et al. (US Pat. No.5,450,395, *as cited in the previous Office Action*).

Regarding claim 26, Couillard teaches a method of transmitting higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device by way of using network time protocol (NPT) server (paragraphs [0047]-[0052]).

Fischer teaches a method of transmitting voice and voice band data and other higher bandwidth signals between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device (paragraphs [0084]-[0085] and [0387]).

It should be noticed that Couillard and Fischer, in combination, fails to suggest using synchronization to improve signal to noise of two devices. However, Hostetter teaches a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized (col.1, lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized, as taught by Hostetter into view of Couillard and Fischer in order to better quality of voice to voice-over-IP services.

Regarding claim 27, Fischer further teaches limitations of the claim in paragraph [0117].

Regarding claim 40, Couillard teaches a system comprising:

a first computing device comprising:

a first processor; and

a first memory storing a first software, said first processor and said first memory used for running and executing said first software to request a first absolute time from a network time protocol (NTP) server, said first computing device receiving said first absolute time in response to said request; and wherein a second computing device receives a second absolute time from said network time protocol (NTP) server, resulting in synchronization of said first computing device to said second computing device, said synchronization reducing clock drift between said first computing device and said second computing device such that packets and signals transmitted between said first computing device and said second computing device is received paragraphs [0047]-[0052].

Fischer teaches a method of transmitting voice and voice band data between a first computing device and a second computing device comprising synchronizing said first computing device and a second computing device (paragraphs [0084]-[0085] and [0387]).

It should be noticed that Couillard and Fischer, in combination, fails to suggest using synchronization to improve signal to noise of two devices. However, Hostetter teaches a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters and receive to be synchronized (col.1, lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of a suggestion of improving the signal-to-noise ratio between a plurality of transmitter and a receiver by a way of the transmitters

and receive to be synchronized, as taught by Hostetter into view of Couillard and Fischer in order to better quality of voice to voice-over-IP services.

Regarding claims 41-42, Fisher further teaches limitations of the claims in paragraphs [0384]-[0385] and [0387].

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hostetter et al. (US. Pat. #: 5,450,395) in view of Ransom et al. (Pub. No.: US 2003/0204756 *as cited in the previous Office Action*).

Regarding claim 28, Hostetter et al. (“Hostetter”) teaches a method of improving the signal to noise ratio of voice band data comprising synchronizing computing devices (col.1, lines 55-60).

It should be noticed that Hostetter fails to clearly teach the feature of syncing the computing devices to an NTP server. However, Ransom teaches such feature in paragraph [0122] for ensuring transferred messages having the correct time and their contents having accurate time.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of syncing the computing devices to an NTP server, as taught by Ransom, into view of Hostetter in order to provide accurate time to the transmitted messages.

10. Claims 29 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couillard (Pub. No. US 2002/0129290) in view of Michelson et al. (Pub. No.: US 2008/0031229).

Regarding claim 29, Couillard teaches a method of synchronizing a transmitting computing device to a receiving computing device of a packet switched telecommunication network comprising:

requesting absolute time from a network time protocol (NTP) server;

receiving said absolute time; and

inputting an adjustment parameter into a frequency controlling hardware of said transmitting computing device or said receiving computing device (paragraphs [0047]-[0052]).

It should be noticed that Couillard fails to clearly teach the feature of residential VoIP gateway. However, Michelson et al. ("Michelson") teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway, as taught by Michelson into view of Couillard in order to provide VoIP service to end users.

Regarding claim 35, Couillard teaches a method of transmitting time sensitive data from at least a first computing device to at least a second computing device in a telecommunication system comprising synchronizing said at least first and said at least second computing devices to network time protocol (NTP) server (paragraphs [0047]-[0052]).

It should be noticed that Couillard fails to clearly teach the feature of residential VoIP gateway. However, Michelson et al. ("Michelson") teaches such feature in paragraph [0022] for a purpose of establishing a VoIP call between a gateway and a soft switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of residential VoIP gateway, as taught by Michelson into view of Couillard in order to provide VoIP service to end users.

Allowable Subject Matter

11. Claims 30-34 and 36-39 are allowed.
12. Claims 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed 01/38/2008 have been fully considered but they are not persuasive.

A/. In response to the Applicant's argument on page 33 wherein the Applicant stated as following:

“The Applicant respectfully submits that Ransom does not teach what is recited in Claim 28. For example, Ransom does not teach “synchronizing one or more computing device to a network time protocol (NTP) server,” as recited in Claim 28. The above passage from [0122] does not disclose a “network time protocol (NTP) server,” as recited in Claim 28...”

The Examiner respectfully disagreed with the Applicant's argument above. In the paragraph [0122], Ransom teaches that:

“...a Network Time Protocol (“NTP”) or other form of time –syncing is utilized on the IED to ensure the transferred messages have the correct time...” Ransom further teaches:

“...Further, correct time stamping of messages is important for real time or revenue related messages...In one embodiment, the IED NTP initiates a request to the network time server, internal or external...” (Emphasis added).

With the above passages, it is clearly to understand that *the network time server is NTP server that provides correct time to the IEDs.*

B/. Applicant’s arguments, see pages 10 through 32 of the Applicants’ remarks, filed 01/31/2008, with respect to the rejection(s) of claim(s) 6-20, 25-27 and 29 have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of newly cited references: Couillard, Fischer et al., Sullivan and Michelson et al..

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN**

Art Unit: 2614

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/BINH K. TIEU/
Primary Examiner
Technology Division 2614

Date: March 2008